



Op/1762 # 6  
PATENT 137

8-2-02

Case Docket No. SEPP17.001AUS  
Date: July 26, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Ninisto et al.  
Appl. No. : 10/067,634  
Filed : February 4, 2002  
For : METHOD OF DEPOSITING  
RARE EARTH OXIDE THIN  
FILMS  
Examiner : Unknown  
Group Art Unit : 1762

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Adeel S. Akhtar, Reg. No. 41,394

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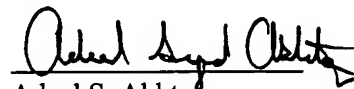
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ATTENTION: APPLICATION BRANCH

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with Thirteen (13) references.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
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Adeel S. Akhtar  
Registration No. 41,394  
Attorney of Record

SEPP17.001AUS



PATENT

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INFORMATION DISCLOSURE STATEMENT

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Dear Sir:

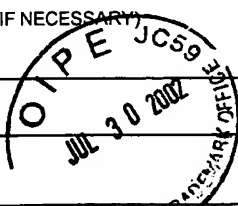
Enclosed is form PTO-1449 listing 13 references that are also enclosed. This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,  
KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: July 26, 2002

By: Adeel S. Akhtar  
Adeel S. Akhtar  
Registration No. 41,394  
Attorney of Record  
620 Newport Center Drive, Sixteenth Floor  
Newport Beach, CA 92660  
(949) 760-0404

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. SEPP17.001AUS	APPLICATION NO. 10/067,634
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (USE SEVERAL SHEETS IF NECESSARY)		APPLICANT Niinistö et al.	
		FILING DATE February 4, 2002	GROUP 1762



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U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
		4,058,430	11/15/77	Suntola et al.			
		5,711,811	01/27/98	Suntola et al.			

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	Mölsä, Heini, et al., "Growth of Yttrium Oxide Thin Films from $\beta$ -Diketonate Precursor," <u>Adv. Materials for Optics and Electronics</u> , 4: 389-400 (1994)
	Putkonen, Matti, et al., "Low-Temperature ALE Deposition of $Y_2O_3$ Thin Films from $\beta$ -Diketonate Precursors," <u>Chem. Vap. Deposition</u> , 7: 44-50 (2001)
	Hong, M., et al., "Epitaxial Cubic Gadolinium Oxide as a Dielectric for Gallium Arsenide Passivation," <u>Science</u> , 283:1897-1900 (1999)
	Seim, Helene, et al., "Growth of $LaCoO_3$ thin films from $\beta$ -Diketonate Precursors," <u>Appl. Surf. Science</u> , 112:243-250 (1997)
	Seim, Helene, et al., "Deposition of $LaNiO_3$ thin films in an atomic layer epitaxy reactor," <u>J. Mater. Chem.</u> , 7:449-454 (1997)
	Cho, M.-H., et al., "Growth stage of crystalline $Y_2O_3$ film on Si(100) grown by an ionized cluster beam deposition," <u>J. Appl. Phys.</u> , 85:2909-2914 (1999)
	Kington, Angus I., et al., "Alternative dielectrics to silicon dioxide for memory and logic devices," <u>Nature</u> , 406:1032-1038 (2000)
	Nieminen, Minna et al., "Formation and stability of lanthanum oxide thin films deposited from $\beta$ -diketonate precursor," <u>Appl. Surf. Science</u> , 174:155-165 (2001)
	Gaboriaud, R.J. et al., "Microstructural investigations of $Y_2O_3$ thin films deposited by laser ablation on $MgO$ ," <u>J. Appl. Phys. A</u> , 71:675-680 (2000)
	Niinistö, Laurie, "Advanced Thin Films For Electronics And Opto-Electronics By Atomic Layer Epitaxy," <u>Int'l Semiconductor Conf.</u> , 23rd Ed., Vol. 1, pp. 33-42 (2000)
	Suntola, Tuomo, "Atomic Layer Epitaxy," <u>Handbook of Grystal Growth</u> , Part B, Ch. 14, pp. 601-663

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EXAMINER	DATE CONSIDERED
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